

FAILURE ISOLATION IN A DISTRIBUTED PROCESSING SYSTEM  
EMPLOYING RELATIVE LOCATION INFORMATION

ABSTRACT

Failure isolation in a distributed processing system of  
5 processor nodes coupled by a multi-drop bus network. The  
processor nodes have information of relative locations of the  
processor nodes on the network, and have an associated local  
error indicator, such as a character display. Each node  
independently tests access to other nodes on the network, and  
10 upon detecting a failure to access one or more nodes, determines,  
from the relative locations, the node having failed access which  
is closest. The failure detecting processor posts, at its  
associated local error indicator, an identifier of the closest  
failed access node. A user may inspect the local error  
15 indicators and thereby isolate the detected failure.